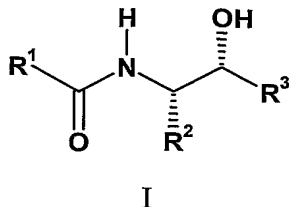


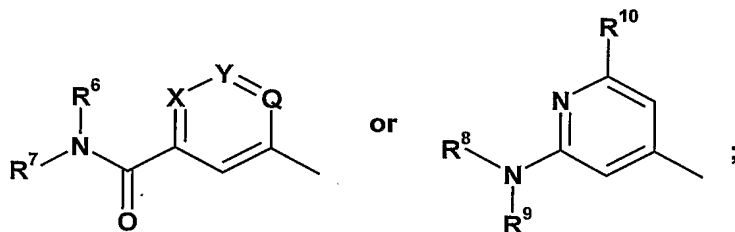
We Claim:

1. A compound of Formula I:



5 where:

R¹ is (C₃-C₇ cycloalkyl)₀₋₁(C₁-C₆ alkyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkenyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkynyl) or C₃-C₇ cycloalkyl, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C₁-C₇ alkoxy, C₃-C₇ cycloalkoxy, oxo, and NR⁴R⁵, biphenyl optionally

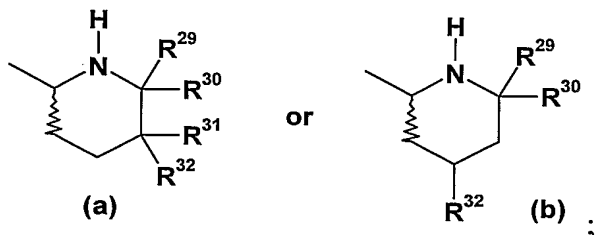


10 substituted with halo, hydrogen,

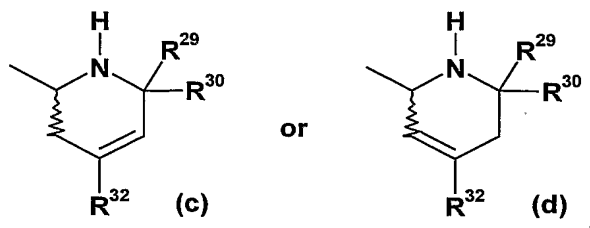
R² is C₁-C₃ alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl;

R³ is:

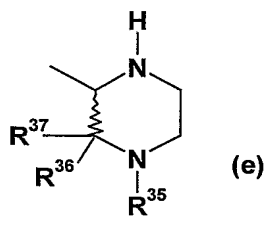
20 i) a piperidin-2-yl moiety of formula:



ii) a tetrahydropyridin-2-yl moiety of formula:



iii) a piperazin-2-yl moiety of formula:



iv) homopiperidin-2-yl;

v) 1,2,3,4-tetrahydroisoquinolin-3-yl optionally substituted with one or two substituents selected from halo, C₁-C₆ alkyl, and C₁-C₆ alkoxy;

vi) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl;

vii) 2-azabicyclo[2.2.1]hept-3-yl optionally substituted with C₁-C₁₀ alkyl optionally substituted with C₁-C₄ alkoxy; or

viii) 2-azabicyclo[2.2.2]oct-3-yl optionally substituted with oxo, or optionally substituted with one or two substituents independently selected from hydroxy, fluoro, and C₁-C₆ alkyl;

X is CH, N, or N⁺-O⁻;

Y is CR¹¹, N, or N⁺-O⁻;

Q is CR¹², N, or N⁺-O⁻;

R⁴ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, or phenyl;

R⁵ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, phenyl, -C(O)(C₁-C₆ alkyl optionally substituted up to three times with fluoro), or

-SO₂(C₁-C₆ alkyl optionally substituted up to three times with fluoro);

R⁶ and R⁷ are independently selected from the group consisting of methyl, ethyl, and propyl;

R⁸ is hydrogen or C₁-C₆ alkyl;

R⁹ is C₃-C₅ cycloalkyl, sec-butyl, or -CH₂R¹³;

R^{10} is $-\text{CF}_2\text{R}^{14}$, $-\text{OR}^{15}$, $-\text{CH}_2\text{C}(\text{O})\text{CH}_3$, $-\text{S}(\text{O})_{1-2}\text{R}^{16}$, $-\text{NR}^{17}\text{SO}_2\text{R}^{18}$, $(\text{C}_1\text{-C}_3 \text{ alkoxy})$ -carbonyl, phenyl optionally substituted with halo, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with $\text{C}_1\text{-C}_3$ alkyl;

5 R^{11} is hydrogen, chloro, isobutyl, CH_2R^{19} ; CF_2R^{20} , 1,1,1-trifluoro-2-hydroxyeth-2-yl, $\text{C}_2\text{-C}_4$ alkenyl optionally substituted with one or two fluorine atoms, OR^{21} , $\text{C}(\text{O})\text{R}^{22}$, N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents selected from the group consisting of hydroxymethyl, methoxy, fluoro, and
10 methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

R^{12} is hydrogen or fluoro;

R^{13} is ethynyl or cyclopropyl;

15 R^{14} is hydrogen or methyl;

R^{15} is difluoromethyl or methanesulfonyl;

R^{16} is $\text{C}_1\text{-C}_4$ alkyl, $\text{C}_3\text{-C}_6$ cycloalkyl, phenyl, or $-\text{NR}^{25}\text{R}^{26}$;

R^{17} is hydrogen, $\text{C}_1\text{-C}_3$ alkyl optionally substituted with up to 3 fluorine atoms, or $\text{C}_3\text{-C}_6$ cycloalkyl;

20 R^{18} is $\text{C}_1\text{-C}_3$ alkyl or $\text{C}_3\text{-C}_6$ cycloalkyl;

R^{19} is fluoro, hydroxy, or $\text{C}_1\text{-C}_3$ alkoxy;

R^{20} is hydrogen, phenyl, or furyl;

R^{21} is $\text{C}_1\text{-C}_3$ alkyl optionally substituted with one or two fluorine atoms;

R^{22} is $\text{C}_1\text{-C}_3$ alkyl, $\text{C}_3\text{-C}_5$ cycloalkyl, $\text{C}_2\text{-C}_3$ alkenyl, $\text{C}_1\text{-C}_3$ alkoxy, $\text{NR}^{23}\text{R}^{24}$,
25 pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;

R^{23} is hydrogen or methyl;

R^{24} is methyl, ethyl, or propyl;

R^{25} is hydrogen or methyl;

30 R^{26} is methyl; or

R^{25} and R^{26} taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;

R^{29} is hydrogen or C_1 - C_6 alkyl;

R^{30} is hydrogen or C_1 - C_6 alkyl;

R^{29} and R^{30} taken together with the carbon to which they are attached form a C_3 - C_6 cycloalkyl ring;

5 R^{31} is hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, or phenyl optionally monosubstituted with C_1 - C_6 alkyl;

R^{32} is hydrogen, R^{33} , or $-(CH_2)_{0-2}-OR^{33}$;

R^{33} is C_1 - C_{10} alkyl optionally substituted with 1-6 fluorine atoms, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, or $-(CH_2)_{0-3}-R^{34}$;

10 R^{34} is C_3 - C_7 cycloalkyl or phenyl each optionally substituted with one or two substituents independently selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with C_1 - C_4 alkyl, or adamantyl;

15 R^{35} is $-(CH_2)_{0-6}-R^{34}$, $-C(O)-(CH_2)_{0-6}-R^{34}$, $-C(O)-(C_1-C_{10} \text{ alkyl})$, $-C(O)-(C_1-C_4 \text{ alkoxy optionally substituted with phenyl})$, C_1 - C_{10} alkyl optionally substituted with 1-6 fluorine atoms, C_2 - C_{10} alkenyl, or C_2 - C_{10} alkynyl;

R^{36} and R^{37} are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group; or a pharmaceutically acceptable salt thereof; provided that: a) no more than one of X, Y, and Q may be N or N^+-O^- ; and b) when X is CH, Y is CR^{11} , and Q is CR^{12} , then one of R^{11} and R^{12} is other than hydrogen.

2. The use of a compound of Claim 1 for the manufacture of a medicament for the treatment of Alzheimer's disease.

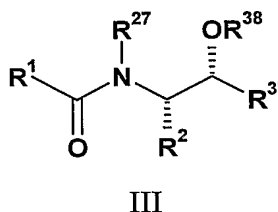
25 3. The use of a compound of Claim 1 for the manufacture of a medicament for the prevention of the progression of mild cognitive impairment to Alzheimer's disease.

4. The use of a compound of Claim 1 for the manufacture of a medicament for
30 treating a disease or condition capable of being improved or prevented by inhibition of BACE..

5. A pharmaceutical formulation adapted for the treatment of conditions resulting from excessive levels of A- β peptide comprising a compound of Claim 1 in combination with one or more pharmaceutically acceptable excipients, carriers, or diluents.

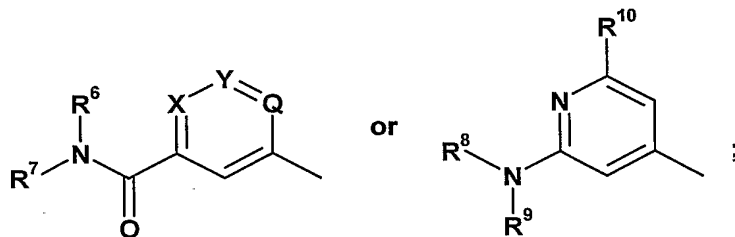
6. A pharmaceutical formulation comprising a compound of Claim 1, in combination with a pharmaceutically acceptable carrier, diluent, or excipient.

7. A compound of Formula III:



where:

R^1 is (C₃-C₇ cycloalkyl)₀₋₁(C₁-C₆ alkyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkenyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkynyl) or C₃-C₇ cycloalkyl, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C₁-C₇ alkoxy, C₃-C₇ cycloalkoxy, oxo, and NR⁴R⁵, biphenyl optionally

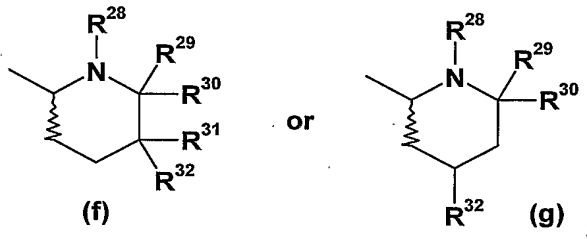


substituted with halo, hydrogen,

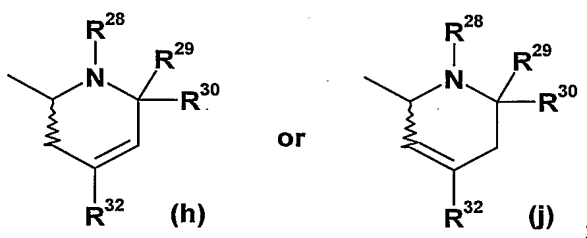
R^2 is C₁-C₃ alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl;

R^{3'} is:

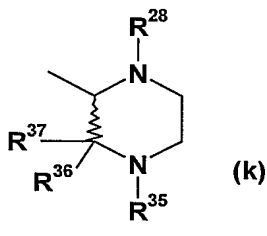
- ix) a piperidin-2-yl moiety of formula:



- x) a tetrahydropyridin-2-yl moiety of formula:



- xi) a piperazin-2-yl moiety of formula:



- xii) homopiperidin-2-yl substituted in the 1-position with variable R²⁸;
- xiii) 1,2,3,4-tetrahydroisoquinolin-3-yl substituted in the 1-position with variable R²⁸ and optionally further substituted with one or two substituents selected from halo, C₁-C₆ alkyl, and C₁-C₆ alkoxy;
- xiv) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl substituted in the 2-position with variable R²⁸;
- xv) 2-azabicyclo[2.2.1]hept-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with C₁-C₁₀ alkyl optionally substituted with C₁-C₄ alkoxy; or
- xvi) 2-azabicyclo[2.2.2]oct-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with oxo, or optionally further substituted with one or two substituents independently selected from hydroxy, fluoro, and C₁-C₆ alkyl;

X is CH, N, or N^+-O^- ;

Y is CR^{11} , N, or N^+-O^- ;

Q is CR^{12} , N, or N^+-O^- ;

5 R^4 is hydrogen, C_1 - C_6 alkyl optionally substituted up to three times with fluoro, or phenyl;

R^5 is hydrogen, C_1 - C_6 alkyl optionally substituted up to three times with fluoro, phenyl, $-C(O)(C_1$ - C_6 alkyl optionally substituted up to three times with fluoro), or $-SO_2(C_1$ - C_6 alkyl optionally substituted up to three times with fluoro);

10 R^6 and R^7 are independently selected from the group consisting of methyl, ethyl, and propyl;

R^8 is hydrogen or C_1 - C_6 alkyl;

R^9 is C_3 - C_5 cycloalkyl, sec-butyl, or $-CH_2R^{13}$;

15 R^{10} is $-CF_2R^{14}$, $-OR^{15}$, $-CH_2C(O)CH_3$, $-S(O)_{1-2}R^{16}$, $-NR^{17}SO_2R^{18}$, (C_1 - C_3 alkoxy)-carbonyl, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with C_1 - C_3 alkyl;

R^{11} is hydrogen, chloro, isobutyl, CH_2R^{19} , CF_2R^{20} , 1,1,1-trifluoro-2-hydroxyeth-2-yl, C_2 - C_4 alkenyl optionally substituted with one or two fluorine atoms, OR^{21} , $C(O)R^{22}$, N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents
20 selected from the group consisting of hydroxymethyl, methoxy, fluoro, and methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

R^{12} is hydrogen or fluoro;

25 R^{13} is ethynyl or cyclopropyl;

R^{14} is hydrogen or methyl;

R^{15} is difluoromethyl or methanesulfonyl;

R^{16} is C_1 - C_4 alkyl, C_3 - C_6 cycloalkyl, phenyl, or $-NR^{25}R^{26}$;

30 R^{17} is hydrogen, C_1 - C_3 alkyl optionally substituted with up to 3 fluorine atoms, or C_3 - C_6 cycloalkyl;

R^{18} is C_1 - C_3 alkyl or C_3 - C_6 cycloalkyl;

R^{19} is fluoro, hydroxy, or C_1 - C_3 alkoxy;

R^{20} is hydrogen, phenyl, or furyl;

R^{21} is C_1 - C_3 alkyl optionally substituted with one or two fluorine atoms;

R^{22} is C_1 - C_3 alkyl, C_3 - C_5 cycloalkyl, C_2 - C_3 alkenyl, C_1 - C_3 alkoxy, $NR^{23}R^{24}$,
pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-
5 1-yl, phenyl, pyridinyl, or furyl;

R^{23} is hydrogen or methyl;

R^{24} is methyl, ethyl, or propyl;

R^{25} is hydrogen or methyl;

R^{26} is methyl; or

10 R^{25} and R^{26} taken together with the nitrogen atom to which they are attached form
a pyrrolidine or piperidine ring;

R^{27} is hydrogen or a nitrogen protecting group;

R^{28} is hydrogen or a nitrogen protecting group;

R^{29} is hydrogen or C_1 - C_6 alkyl;

15 R^{30} is hydrogen or C_1 - C_6 alkyl;

R^{29} and R^{30} taken together with the nitrogen to which they are attached form a C_3 -
 C_6 cycloalkyl ring;

R^{31} is hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, or phenyl optionally
monosubstituted with C_1 - C_6 alkyl;

20 R^{32} is hydrogen, R^{33} , or $-(CH_2)_{0-2}-OR^{33}$;

R^{33} is C_1 - C_{10} alkyl optionally substituted with 1-6 fluorine atoms, C_2 - C_6 alkenyl,
 C_2 - C_6 alkynyl, or $-(CH_2)_{0-3}-R^{34}$;

R^{34} is C_3 - C_7 cycloalkyl or phenyl each optionally substituted with one or two
substituents independently selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6
25 alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted
with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted
with C_1 - C_4 alkyl, or adamantyl;

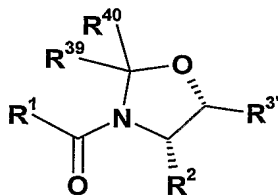
R^{35} is $-(CH_2)_{0-6}-R^{34}$, $-C(O)-(CH_2)_{0-6}-R^{34}$, $-C(O)-(C_1-C_{10} \text{ alkyl})$, $-C(O)-(C_1-C_4$
alkoxy optionally substituted with phenyl), C_1 - C_{10} alkyl optionally substituted with 1-6
30 fluorine atoms, C_2 - C_{10} alkenyl, or C_2 - C_{10} alkynyl;

R^{36} and R^{37} are both hydrogen or, taken together with the carbon atom to which
they are attached form a carbonyl group;

R^{38} is hydrogen or an oxygen protecting group; or an acid addition salt thereof provided that: a) no more than one of X, Y, and Q may be N or N^+-O^- ; b) when X is CH, Y is CR^{11} , and Q is CR^{12} , then one of R^{11} and R^{12} is other than hydrogen; and c) at least one of R^{27} , R^{28} , and R^{38} is other than hydrogen.

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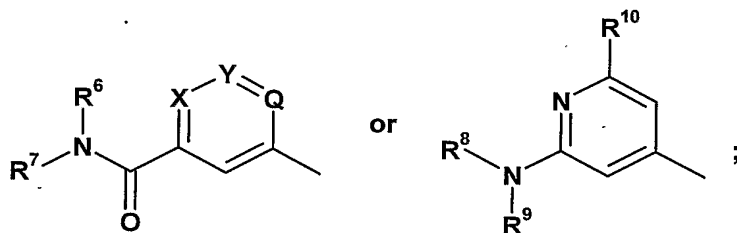
8. A compound of Formula IV:



IV

10 where:

R^1 is $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_1-C_6 \text{ alkyl})$, $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkenyl})$, $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkynyl})$ or $C_3-C_7 \text{ cycloalkyl}$, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C_1-C_7 alkoxy, C_3-C_7 cycloalkoxy, oxo, and NR^4R^5 , biphenyl optionally



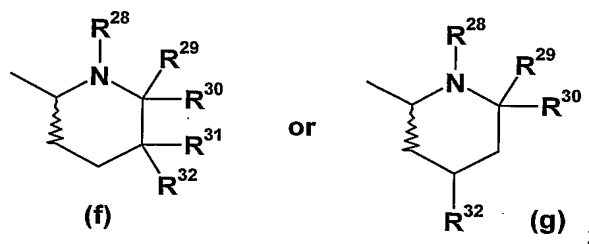
15 substituted with halo, hydrogen,

R^2 is C_1-C_3 alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C_1-C_6 alkoxy optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, and C_1-C_6 alkylthio optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C_1-C_6 alkoxy optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, and C_1-C_6 alkylthio optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl;

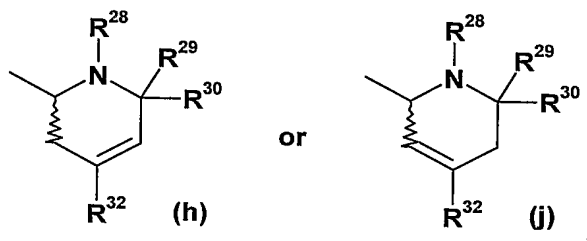
$R^{3'}$ is:

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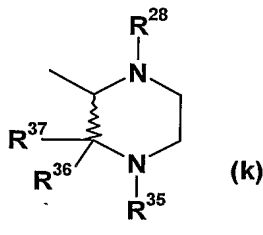
ix) a piperidin-2-yl moiety of formula:



x) a tetrahydropyridin-2-yl moiety of formula:



xii) a piperazin-2-yl moiety of formula:



- xii) homopiperidin-2-yl substituted in the 1-position with variable R^{28} ;
- xiii) 1,2,3,4-tetrahydroisoquinolin-3-yl substituted in the 1-position with variable R^{28} and optionally further substituted with one or two substituents selected from halo, C_1 - C_6 alkyl, and C_1 - C_6 alkoxy;
- xiv) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl substituted in the 2-position with variable R^{28} ;
- xv) 2-azabicyclo[2.2.1]hept-3-yl substituted in the 2-position with variable R^{28} and optionally further substituted with C_1 - C_{10} alkyl optionally substituted with C_1 - C_4 alkoxy; or
- xvi) 2-azabicyclo[2.2.2]oct-3-yl substituted in the 2-position with variable R^{28} and optionally further substituted with oxo, or optionally further substituted with one or two substituents independently selected from hydroxy, fluoro, and C_1 - C_6 alkyl;

X is CH, N, or N^+-O^- ;

Y is CR^{11} , N, or N^+-O^- ;

Q is CR¹², N, or N⁺-O⁻;

R⁴ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, or phenyl;

5 R⁵ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, phenyl, -C(O)(C₁-C₆ alkyl optionally substituted up to three times with fluoro), or -SO₂(C₁-C₆ alkyl optionally substituted up to three times with fluoro);

R⁶ and R⁷ are independently selected from the group consisting of methyl, ethyl, and propyl;

R⁸ is hydrogen or C₁-C₆ alkyl;

10 R⁹ is C₃-C₅ cycloalkyl, *sec*-butyl, or -CH₂R¹³;

R¹⁰ is -CF₂R¹⁴, -OR¹⁵, -CH₂C(O)CH₃, -S(O)₁₋₂R¹⁶, -NR¹⁷SO₂R¹⁸, (C₁-C₃ alkoxy)-carbonyl, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with C₁-C₃ alkyl;

15 R¹¹ is hydrogen, chloro, isobutyl, CH₂R¹⁹; CF₂R²⁰, 1,1,1-trifluoro-2-hydroxyeth-2-yl, C₂-C₄ alkenyl optionally substituted with one or two fluorine atoms, OR²¹, C(O)R²², N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents selected from the group consisting of hydroxymethyl, methoxy, fluoro, and methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

R¹² is hydrogen or fluoro;

R¹³ is ethynyl or cyclopropyl;

R¹⁴ is hydrogen or methyl;

25 R¹⁵ is difluoromethyl or methanesulfonyl;

R¹⁶ is C₁-C₄ alkyl, C₃-C₆ cycloalkyl, phenyl, or -NR²⁵R²⁶;

R¹⁷ is hydrogen, C₁-C₃ alkyl optionally substituted with up to 3 fluorine atoms, or C₃-C₆ cycloalkyl;

R¹⁸ is C₁-C₃ alkyl or C₃-C₆ cycloalkyl;

30 R¹⁹ is fluoro, hydroxy, or C₁-C₃ alkoxy;

R²⁰ is hydrogen, phenyl, or furyl;

R²¹ is C₁-C₃ alkyl optionally substituted with one or two fluorine atoms;

R^{22} is C_1 - C_3 alkyl, C_3 - C_5 cycloalkyl, C_2 - C_3 alkenyl, C_1 - C_3 alkoxy, $NR^{23}R^{24}$, pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;

R^{23} is hydrogen or methyl;

5 R^{24} is methyl, ethyl, or propyl;

R^{25} is hydrogen or methyl;

R^{26} is methyl; or

R^{25} and R^{26} taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;

10 R^{28} is hydrogen or a nitrogen protecting group;

R^{29} is hydrogen or C_1 - C_6 alkyl;

R^{30} is hydrogen or C_1 - C_6 alkyl;

R^{29} and R^{30} taken together with the nitrogen to which they are attached form a C_3 - C_6 cycloalkyl ring;

15 R^{31} is hydrogen, C_1 - C_6 alkyl, C_3 - C_6 cycloalkyl, or phenyl optionally monosubstituted with C_1 - C_6 alkyl;

R^{32} is hydrogen, R^{33} , or $-(CH_2)_{0-2}-OR^{33}$;

R^{33} is C_1 - C_{10} alkyl optionally substituted with 1-6 fluorine atoms, C_2 - C_6 alkenyl, C_2 - C_6 alkynyl, or $-(CH_2)_{0-3}-R^{34}$;

20 R^{34} is C_3 - C_7 cycloalkyl or phenyl each optionally substituted with one or two substituents independently selected from the group consisting of halo, C_1 - C_6 alkyl, C_1 - C_6 alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with C_1 - C_4 alkyl, or adamantyl;

25 R^{35} is $-(CH_2)_{0-6}-R^{34}$, $-C(O)-(CH_2)_{0-6}-R^{34}$, $-C(O)-(C_1-C_{10} \text{ alkyl})$, $-C(O)-(C_1-C_4 \text{ alkoxy optionally substituted with phenyl})$, C_1 - C_{10} alkyl optionally substituted with 1-6 fluorine atoms, C_2 - C_{10} alkenyl, or C_2 - C_{10} alkynyl;

R^{36} and R^{37} are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group;

30 R^{38} is hydrogen or an oxygen protecting group;

R^{39} and R^{40} are independently selected from methyl, ethyl, or propyl; or an acid addition salt thereof provided that no more than one of X, Y, and Q may be N or N^+-O^- .